

## I CLAIM:

1. A mounting tool comprising:
  - a base extending along a first direction that is parallel to a longitudinal dimension of said base;
  - a height gage attached to the base, said height gage comprising:
    - a first leg attached to the base and extending along a second direction that is not parallel to said first direction; and
    - a second leg attached to the first leg and comprising a support portion extending along a third direction that is not parallel to second direction.
2. The mounting tool of claim 1, wherein said height gage is adjustable in length.
3. The mounting tool of claim 2, wherein said first leg is telescopically received within said second leg.
4. The mounting tool of claim 2, wherein said second leg is telescopically received within said first leg.
5. The mounting tool of claim 2, further comprising an adjustment wheel coupled to said first leg and said second leg so that rotation of said adjustment wheel adjusts the length of said height gage.
6. The mounting tool of claim 3, further comprising an adjustment wheel coupled to said first leg and said second leg so that rotation of said adjustment wheel adjusts the length of said height gage.

7. The mounting tool of claim 4, further comprising an adjustment wheel coupled to said first leg and said second leg so that rotation of said adjustment wheel adjusts the length of said height gage.

8. The mounting tool of claim 1, wherein said second leg is magnetic.

9. The mounting tool of claim 1, wherein said base has a slot that extends along said first direction.

10. The mounting tool of claim 9, wherein said slot forms an opening extending along said first direction that faces a portion of said base.

11. The mounting tool of claim 10, wherein said slot and opening have a trapezoidal cross-section when viewed from a plane perpendicular to said first direction.

12. The mounting tool of claim 9, further comprising an extension guide that is inserted within said slot.

13. The mounting tool of claim 12, wherein said extension guide has a length that is greater than a length of said slot.

14. The mounting tool of claim 1, wherein said base comprises a first set of holes that have an orientation with respect to each other that corresponds to the orientation of mounting holes of a position measuring device.

15. The mounting tool of claim 14, wherein said base comprises a second set of holes that have an orientation with respect to each other that

corresponds to the orientation of mounting holes of a spar into which said position measuring device is inserted.

16. The mounting tool of claim 14, wherein said position measuring device comprises a linear encoder.

17. The mounting tool of claim 15, wherein said position measuring device comprises a linear encoder.

18. The mounting tool of claim 12, wherein said extension guide comprises a hole that has a longitudinal axis that extends perpendicular to said first direction.

19. The mounting tool of claim 18, wherein said base comprises a hole aligned with said hole of said extension guide; and a locking pin inserted in said hole of said extension guide and said hole of said base so as to attach said extension guide to said base.

20. The mounting tool of claim 12, wherein said extension guide comprises holes that have an orientation with respect to each other that corresponds to the orientation of mounting holes of a position measuring device.

21. The mounting tool of claim 20, wherein said extension guide comprises a second set of holes that have an orientation with respect to each other that corresponds to the orientation of mounting holes of a spar into which said position measuring device is inserted.

22. The mounting tool of claim 20, wherein said position measuring device comprises a linear encoder.

23. The mounting tool of claim 21, wherein said position measuring device comprises a linear encoder.

24. A method of mounting a position measuring device to a machine tool, comprising:

positioning a template adjacent to said machine tool, wherein said template comprises a plurality of holes that correspond to mounting holes of a position measuring device and said template is distinct from said position measuring device;

forming holes in said machine tool based on positions of said plurality of holes;

aligning said mounting holes of said position measuring device with said holes formed in said machine tool; and

attaching said position measuring device to said machine tool.

25. The method of claim 24, wherein said position measuring device comprises a linear encoder.

26. The method of claim 24, wherein said attaching comprises inserting screws into said aligned mounting holes of said position measuring device and said holes formed in said machine tool.

27. The method of claim 24, wherein said template is not a linear encoder.

28. The method of claim 24, wherein said machine tool does not move along an axis of travel from the time of positioning to said time of attaching.

29. The method of claim 24, wherein said template is supported on said machine tool during said positioning.

30. The method of claim 24, comprising attaching said position measuring device to a reading head bracket prior to said positioning.

31. The method of claim 30, comprising:  
positioning said reading head bracket against said machine tool;  
and  
marking mounting holes of said reading head bracket on the machine tool.

32. The method of claim 31, comprising:  
detaching said position measuring device from said reading head bracket; and  
attaching said reading head bracket to said machine tool where said mounting holes are located.

33. The method of claim 32, further comprising:  
attaching said template to said reading head bracket attached to said machine tool subsequent to said positioning of said template.

34. The method of claim 33, further comprising adjusting said template so as to be aligned with an axis of travel of said machine tool.

35. The method of claim 33, comprising detaching said template from said reading head bracket prior to said attaching.

36. A method of mounting a position measuring device to a machine tool, comprising:  
positioning a template adjacent to said machine tool, wherein said template comprises a plurality of holes that correspond to mounting holes of a

spar that is to support a position measuring device and said template is distinct from said position measuring device;

forming holes in said machine tool based on positions of said plurality of holes;

aligning said mounting holes of said spar with said holes formed in said machine tool;

attaching said spar to said machine tool; and

attaching said position measuring device to said spar.

37. The method of claim 36, wherein said position measuring device comprises a linear encoder.

38. The method of claim 36, wherein said attaching of said spar comprises inserting screws into said aligned mounting holes of said position measuring device and said holes formed in said machine tool.

39. The method of claim 36, wherein said template is not a linear encoder.

40. The method of claim 36, wherein said machine tool does not move along an axis of travel from the time of positioning to said time of attaching said spar.

41. The method of claim 36, wherein said template is supported on said machine tool during said positioning.

42. The method of claim 36, comprising attaching said position measuring device to a reading head bracket prior to said positioning.

43. The method of claim 42, comprising:

positioning said reading head bracket against said machine tool;  
and  
marking mounting holes of said reading head bracket on the  
machine tool.

44. The method of claim 43, comprising:  
detaching said position measuring device from said reading  
head bracket; and  
attaching said reading head bracket to said machine tool where  
said mounting holes are located.

45. The method of claim 44, further comprising:  
attaching said template to said reading head bracket attached to  
said machine tool subsequent to said positioning of said template.

46. The method of claim 45, further comprising adjusting said  
template so as to be aligned with an axis of travel of said machine tool.

47. The method of claim 45, comprising detaching said template  
from said reading head bracket prior to said attaching of said spar.